

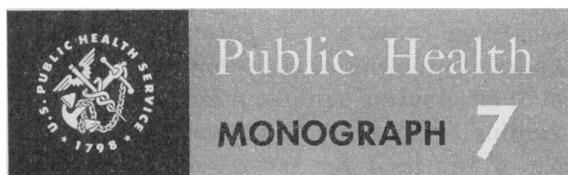
Mental Health Screening of School Children

By CHARLES A. ULLMANN, Ed.D.

THE POLICY in community psychiatric clinics of leaving entirely to the patient or his family the responsibility for the decision to seek psychiatric help follows the pattern prevailing in private medical practice. By following this policy, publicly supported psychiatric services tend to focus on those members of the community who are already ill and are perceived as being ill either by themselves or their families.

There is a need to study whether this self-identification policy, in which the essential element is that the initiative must come primarily from the patient or his family, is the most efficient or appropriate basis for the initial selection of patients in clinics whose primary concern is public or community mental health. In time, it may also be necessary to examine the appropriateness of those considerations which commonly enter into the decision as to which of the self-identified applicants obtain treatment services. Some of those considerations are: apparent urgency of the patient's problem, the adequacy of the patient to his life role, estimates of therapeutic promise, economic circumstances, degree of professional interest in the patient's particular problem, immediate availability of therapeutic time, and/or patient's capacity to survive a clinic waiting list.

For public health programs which are geared to preventing illness and promoting the community level of health beyond the point of mere absence of disease, it may be desirable to replace the "trapper" technique of self-identification with the more selective techniques of the hunter. In case-work terms, this means relating clinic intake policy to community needs as defined by survey or screening, developing referral techniques which will permit selection of those cases



This article is a discussion of the principal findings presented in Public Health Monograph No. 7, published concurrently with this issue of *Public Health Reports*. The author is the clinical psychologist on the staff of the Prince Georges County (Md.) Mental Health Clinic, a demonstration activity of the Public Health Service, sponsored jointly with the Maryland State Department of Health and the Prince Georges County Health Department. The studies reported were conducted during the school year 1950-51 by the clinic in cooperation with the Prince Georges County Board of Education. The basic findings were presented before the American Psychological Association at its sixtieth annual meeting in Washington, D. C., September 1-6, 1952.

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upon whom the expenditure of professional time will give the greatest return in terms of community mental health, and evolving a

rationale for formulating and assessing therapeutic goals.

This paper summarizes the results of a study which is reported in full in Public Health Monograph No. 7, "Identification of Maladjusted School Children." The study deals with the first of the aforementioned questions of policy and method, namely, a survey of the nature and extent of the mental health problem presented by a group of ninth-grade children in a public school system. The investigations were made in an effort to develop a method for identifying those who might need assistance because of problems of adjustment. The problem of effectuating suitable referral techniques, including bringing about an emotional acceptance of the need for service on the part of persons who may be deemed maladjusted, and the problem of establishing guidelines for therapeutic activity, were considered beyond the scope of the study.

The Maladjusted Child

In the study, an attempt was made to learn to what extent judgments by teachers might be relied upon as a means of identifying children who needed special assistance because of adjustment difficulties, that is, an examination was made of the correlation between need for mental health services as expressed in teachers' judgments and need as determined from independent reference points. These independent reference points were the classmates of pupils, each pupil himself, and the opinions of clinicians who were asked to rate the significance for mental health of various items of behavior. Such questions were considered as: To what extent are children who are identified as maladjusted by the teachers the same ones whom classmates would identify as being maladjusted? In terms of clientele who may be served by a mental health clinic, what are the implications of relying upon such key figures as teachers to identify school children who need care? Is there evidence of need for mental health care beyond those needs which are recognized by such observers as teachers? What is included in the term "maladjustment" as used in the school setting? To what extent do teachers and clinicians agree on what constitutes evidence of maladjustment?

Psychological or psychiatric assistance, as used in this context, may be regarded as a service which supplements or reinforces the counseling and guidance services upon which all pupils may draw as they progress through the successive phases of their education. As such, it may be used to support the pupil, parent, school staff, or community in the effort to achieve broad educational and health purposes whenever the classroom program and pupil personnel services ordinarily available require supplementation. While the relationship between such general and special services will vary from place to place and from time to time, according to the relative strength and adequacy of each, the methods employed in this investigation are of general applicability in that the testing and rating techniques are suitable for typical classroom use.

The subjects of the main study were 404 white ninth-grade boys and 406 white ninth-grade girls in the core classes of 23 teachers—21 women and 2 men—in Prince Georges County, Md., during the school year 1950-51. The experimental sample included 97.5 percent of the pupils on the register in these classes and 44.5 percent of the ninth-grade registration in the white public schools of the county. Only one core class was included for each core teacher who participated. Whenever two classes were taught by the same teacher, deliberate choice of the more literate class was made for this study, on the basis of the teacher's judgment.

Forced-Choice Technique

A collateral study was carried on in grades four to eight during the fall of the same school year for the purpose of developing a Forced-Choice Test which, when completed, was used in the study at the ninth-grade level. Forced-choice technique is employed for the purpose of minimizing intentional bias on the part of raters and aiding raters to make more discriminating judgments when bias is not a factor. The essential feature of such tests lies in the pairing of one statement or item, capable of discriminating between upper and lower groups on a trait, with another item which does not have discriminative power but appears equally attractive to raters. Pairs of such state-

ments are often combined into tetrads and raters are then required to choose the most appropriate statement of the tetrad to describe the ratee.

In order to discover the discriminative power of each statement in the eyes of mental health specialists, 22 clinicians were asked to rate each of 194 statements on a 5-point scale of significance for mental health. At the same time, each of 50 teachers was asked to rate on a 5-point scale one "well-adjusted" child and one "maladjusted" child according to the degree to which each statement characterized the child. The correlation between the discriminative power of each statement, as obtained from the clinicians, and the discriminative power, as obtained from the teachers, was 0.86. Teachers and clinicians were in closer agreement on favorable than on unfavorable statements.

While it appeared that clinicians and teachers agreed on the significance of most of the items as indicators of adjustment, they differed on the meaning of politeness and obedience. Teachers felt that politeness and obedience were characteristic of good adjustment whereas clinicians felt that the significance of these items as indicators of adjustment was equivocal. Also, a number of features upon which clinicians rely in judging the adjustment status of children are matters relatively unavailable to classroom teachers, such as preference on the part of a child for associating with a different age or grade group than the one to which he is assigned

Measures of Adjustment Status

Six measures of adjustment status were then obtained for each ninth-grade child:

1. From teachers, a categorical rating of each child as well adjusted, moderately maladjusted, or seriously maladjusted, together with an estimate by the teacher of whether this rating was given with much, some, or little confidence.

2. From teachers, an adjustment score on the specially constructed Forced-Choice Test.

- 3, 4, 5. From pupils, adjustment scores on the Self and Social components of the California Test of Personality Intermediate Form A and the Basic Difficulty Scale of the SRA Youth Inventory Form A.

6. From classmates, a standard score derived from sociometric ratings of probable occupational adequacy.

Teachers thought that 8 percent of the ninth-

grade children were likely sooner or later to have serious problems of adjustment and to need special help or care because of such problems. In 1927, Wickman reported that teachers considered 7 percent of elementary school children to be serious behavior problems. An intervening study by Rogers in 1940, using multiple criteria, of which teachers' judgments were but one, assessed an even higher percentage (12) of children in the first six grades as seriously maladjusted. Although allowance must be made in these comparisons for differences in sampling, phrasing, and basis of assessment, it appears that teachers regard serious maladjustment and, presumably, the need for mental health assistance, to be at least as great now as at the time of the Wickman study.

Data from all three of these studies and data from juvenile courts and psychiatric clinics agree in reporting more maladjusted boys than maladjusted girls. The ratios vary from 1.4 boys to 1 girl in psychiatric clinics to more than 4 boys to 1 girl in courts. This ratio is reversed among adult applicants to psychiatric clinics, where women outnumber men. In the present study, and in the Wickman study, teachers rated four boys seriously maladjusted to every girl so rated.

Classmates, to an even greater extent than teachers, considered boys to be more maladjusted than girls, so that, regardless of the merit of the judgments, it appears that boys receive, in the combined criticisms of peers and teachers, a much greater volume of adverse appraisal than do girls, with such further effects on boys as that disapproval may itself occasion.

There was a marked difference in the way teachers as a group rated boys and the way they rated girls. The teachers gave the girls more favorable ratings than the boys and felt more confident of these ratings, notwithstanding the fact that teachers' ratings for girls bore relatively little resemblance to the way the class as a whole rated girls or to the way the girls felt about themselves. This is shown by correlations no higher than 0.23 between teachers' categorical ratings and measures obtained either from classmates or from self-descriptive personality tests. Teachers' ratings of boys, however, showed a much closer relationship to

classmates' ratings than did teachers' ratings of girls.

The confidence felt by teachers in their ratings was found to vary with the merit of the rating rather than the sex of the child; that is, teachers felt confident about a rating which was favorable regardless of whether they were rating a boy or a girl.

On the basis of these data, it was hypothesized that teachers' ratings of girls were favorable because the teachers lacked opportunity to observe or lacked awareness of the manner in which girls made their significant adjustments, and that favorable ratings were often awarded to girls in the absence of positive evidence indicating that unfavorable ratings should be given. In the case of boys, adverse ratings appeared to have been given in the presence of evidence derived from acted-out behavior. This hypothesis appeared to be supported by a study of the characteristics and interrelationships of the remaining measures employed with the ninth-grade children, as shown below.

It appeared, from the data obtained in grades 4 to 8, that teachers rated most comfortably those items of behavior which came closest to their day-to-day experience with children, namely, attitudes toward and habits of school work. They felt less confidence in rating aspects of children's behavior which referred to home or social relationships, to passive hostility, and to matters about which children worry.

The Forced-Choice Test, employing items to which teachers felt they could respond with confidence, focused mainly on objectively observable aspects of behavior. With this test the ratio of boys to girls rated maladjusted by teachers was raised over that found when teachers assessed children categorically and also over that found with ratings by peers. The correlation of the two methods of obtaining ratings by teachers, categorical and forced choice, was much higher for boys (0.73) than for girls (0.43). Use of this test resulted in a substantial (0.49) correlation between ratings of girls by teachers and ratings of girls by classmates, in contrast to the low (0.23) correlation obtained when teachers rated the girls categorically. In the case of boys, a substantial correlation appeared between teachers'

categorical ratings and sociometric ratings. This was not significantly altered by the introduction of the Forced-Choice Test. The Forced-Choice Test acted as a kind of telescope which, while it failed to add to the picture of boys obtained through teachers' unaided vision, permitted the variations in girls' adjustment to become apparent.

Personality Tests

Whereas ratings, as exemplified by the Forced-Choice Test, dealt with observable evidence, the personality tests relied mainly on report by the subject of his own feelings and attitudes. Focusing upon items of "observable" or acted-out behavior tended to increase the imbalance against boys; focusing upon "subjective" data had the opposite effect; that is, it tended either to minimize this imbalance or to show the girls to be more maladjusted than the boys, as exemplified by the results on the SRA Youth Inventory Basic Difficulty Scale. Furthermore, according to the published normative data, girls acknowledge much more often than boys feeling disturbed about the problems included on the Basic Difficulty Scale. Of the list on which girls feel more disturbed, they exceed boys by the greatest amounts in the following:

	<i>Boys</i>	<i>Girls</i>
	<i>(per-</i>	<i>(per-</i>
	<i>cent)</i>	<i>cent)</i>
I worry about tests.....	34	52
I worry about little things.....	26	44
I'm easily excited.....	14	32
I have a "crush" on an older person..	4	13
My feelings are easily hurt.....	19	39
I'm afraid to speak up in class.....	15	29
I have frequent headaches.....	7	16

Boys respond in higher percentage than girls on the following five items:

	<i>Boys</i>	<i>Girls</i>
	<i>(per-</i>	<i>(per-</i>
	<i>cent)</i>	<i>cent)</i>
I think about sex a good deal of the time.....	17	8
I am too restless to stay in school....	10	5
My teachers are too strict.....	9	5
I'm losing faith in religion.....	8	5
Is it wrong to deny the existence of God?	9	6

It is of particular interest to note that while teachers felt very little confidence in their ability to make ratings on items having to do with children's tendency to worry, such items are among those which, on the SRA Youth Inventory, differentiate the adjustment problems of girls most sharply from those of boys. This observation and the fact that the correlation of teachers' ratings and sociometric ratings is increased so much for girls when a forced-choice technique replaces the categorical method indicate that teachers do not readily react to the symptomatic aspects of girls' adjustment.

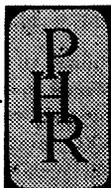
Essentially different pictures of the adjustment of children are obtained whenever children's adjustment is assessed through judgments by raters and through judgments from self-perceptions. Teachers' ratings of adjustment and sociometric ratings obtained from classmates showed a much closer relationship to each other than to scores on personality tests. Adjustment scores on self-descriptive personality tests also correlated more highly among themselves than they did with ratings. Correlation coefficients between measures representing each of these approaches or categories of measurement (that is, ratings by observers versus adjustment scores on self-descriptive personality tests) were low, ranging from 0.15 to 0.33. The correlation between teacher and sociometric ratings was 0.56, and the correlations among the personality tests ranged from 0.47 to 0.73. The size of the correlation (0.61) between two tests of dissimilar format and content (SRA Basic Difficulty and California "Self" scores) suggests that they are measuring a meaningful attribute of the personality. Ratings were more highly intercorrelated for boys than for girls and self-descriptive personality test scores were more highly intercorrelated for girls than for boys.

Summary

On the basis of the study of white ninth-grade public school children, the assessment of maladjustment appears to require at least two approaches, each of which is sensitive to a particular class of symptoms. Ratings appear to be better predictors of the response by society to acted-out behavior, and self-descriptive data appear to be better predictors of that aspect of adjustment which has to do with feelings, attitudes, inner tensions, and what the individual himself will choose to do. Children identified as maladjusted by each of these two general methods are likely to exert considerably different demands upon therapeutic time and upon health, welfare, and educational funds. This problem ultimately may be reducible to comparing the present defiance of authority on the part of a boy and the probability that he will be taken into juvenile court with inner tensions on the part of a girl and the probability that as an adult she will make application in her own behalf at a mental health clinic.

For the present, both types of measure (ratings by observers and self-descriptive data) appear to be necessary to a full picture of adjustment status. Further research may appropriately be directed toward examining the specific criteria for which each type of predictor is valid.

As a result of fractionating the term "maladjustment" into two components, each of which has a potential relationship to different forms of behavior, two questions are posed for future study: (1) the relative degree to which persons of each type present a significant locus of concern for public mental health programs, and (2) the extent to which various techniques of discovery and referral are appropriate for the mental health needs represented in these two varieties of symptomatic behavior.



Rodent Control Series

16 mm., sound, black and white, 1951.

Audience: Public Health personnel and others interested in the study of rats and the practice of rat control. Sections of it may be of interest to school groups.

Available: Loan—Federal Security Agency, Public Health Service, Communicable Disease Center, 50 Seventh Street, Atlanta, Ga. Purchase—United World Films, Inc., 1445 Park Avenue, New York 29, N. Y.

This series of seven films, produced jointly by the U. S. Army and the Public Health Service, is based on footage obtained by filming rats over long periods under conditions simulating natural ones as nearly as possible. A yard was prepared containing food and terrain favorable to rat life, and the rats were conditioned, over a period of time, to the noise of the motion-picture camera and the necessary lighting arrangements, so that they came to ignore them. Cut-away embankments with glass facing were prepared in order to make visible the burrowing habits of the rats.

1. *The Rat Problem*—M37a, 25 minutes

The extent and seriousness of the health hazards and economic damage created by rat infestation are emphasized, both in terms of history and the present. This film develops the idea that study of rat habits and living patterns is necessary to the practice of effective control.

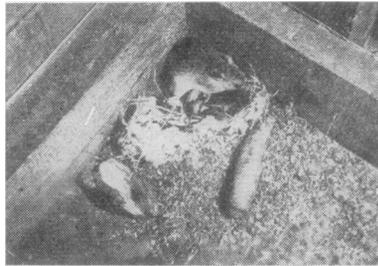
2. *Habits and Characteristics of the Norway Rat*—M37b, 28 minutes

The Norway rat is described in detail and compared with the roof rat

as to size, strength, and features; the living pattern is shown, including feeding habits, breeding habits, and the environmental factors which allow the rats to flourish.

3. *Habits and Characteristics of the Roof Rat*—M37c, 14 minutes

Similar to No. 2 in the series, this film describes the roof rat and compares and contrasts its habits and abilities with the Norway rat. The emphasis is on what these characteristics mean in terms of the rat's relation to man.



4. *Practical Rat Control—I, Sanitation Techniques in Rat Control*—M37d, 21 minutes

Using the film record of the rat's living and food gathering habits, the film shows practical methods for eliminating factors necessary for the rat's existence. Emphasis is on the proper disposal of garbage, storage of food, and cleanliness.

5. *Practical Rat Control—II, Ratproofing*—M37e, 18 minutes

Rats are observed pitting their strength and gnawing abilities against various test materials. On the basis of these demonstrations, the proper methods are shown for preventing rats from gaining entry into a building or buildings, either by burrowing, or by getting in above ground.

6. *Practical Rat Control—III, Rat Killing*—M37f, 36 minutes

This film shows the advantages and disadvantages and the techniques for using such rat poisons as red squill, ANTU, arsenic trioxide, 1080 water, and warfarin, and for using rat traps. The film emphasizes that for effectiveness of these

techniques, sanitation and ratproofing are essential.

7. *Rat Ectoparasite Control*—M37g, 12 minutes

The importance of the rat flea in transmitting disease from rat to man is stressed, as well as the increased incidence of human infestation when the rat host has been killed. Methods for eliminating the rat flea population with DDT before attempting to kill the rats are described in detail. The film emphasizes the importance of rat control—sanitation, ratproofing, and rat killing—in conjunction with control of rat ectoparasites, for the complete elimination of rat-borne diseases.

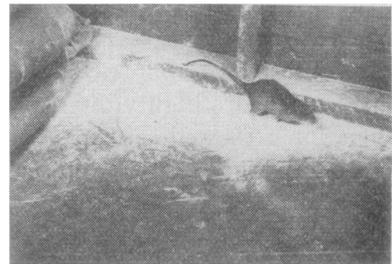
Rural Rat Control

16 mm., sound, black and white, 16 minutes, 1951.

Audience: Public health personnel and others concerned with rat control.

Available: Loan—Federal Security Agency, Public Health Service, Communicable Disease Center, 50 Seventh Street, Atlanta, Ga. Purchase—United World Films, Inc., 1445 Park Avenue, New York 29, N. Y.

This film shows how the conditions on a typical farm favor the growth of rats by providing them with food sources and suitable harborage. The methods of ratproofing buildings and food sources, and the measures for sanitary garbage disposal are described in detail. Methods are



also shown for poisoning the rats, which are now deprived of food and harborage, by using red squill, calcium cyanide, and warfarin. A check of the effectiveness of the rat control and a continued vigilance against further invasion is the use of talcum powder or flour to detect rat tracks.

